

PROJECT DOCUMENTATION

FitFlex: Your Personal Fitness Companion

1.INTRODUCTION

Project Title: ZenFit Hub

Team ID: NM2025TMID38547

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2.PROJECT OVERVIEW

- Purpose:

ZenFit Hub is a web-based personal fitness companion website designed to help users track, plan, and improve their fitness journey. It empowers individuals to build healthier lifestyles by making fitness personalized, accessible and motivating through an all-in-one digital companion. It acts as a personal companion to help users meet their fitness goals. It acts not just about exercising, but about overall health guidance.

- Features:

- Workout Management
- Nutrition Guidance
- Diet Suggestions
- Progress Tracking
- Motivation & Engagement
- Admin control panel

3.ARCHITECTURE

- Frontend:
It is everything the user sees and interacts within an application.
HTML, CSS, Javascript, React.js with Bootstrap & Material UI.
- Backend:
It is the server-side part of an application that processes data, applies logic, and sends results to the frontend.
Node.js & Express.js managing API for workouts, nutrients, etc...
- Database:
It is the storage system that keeps all users and fitness-related data safe, organized, and retrievable.
MongoDB Store users data, application & chat messages

4.SETUP INSTRUCTIONS

- Prerequisites:

Node.js

MongoDB

React.js

HTML,CSS and Javascript

Git

Visual Studio Code

- Installation Steps:

Navigate into the cloned repository directory and install libraries:

-cd fitness-app-react

-npm install

Start the development server, execute the command:

-npm start

Access the web browser & Navigate:

-<https://localhost:3000>

Version control in GitHub:

-<https://git-scm.com/downloads>

Integrated Development Environment:

-Visual Studio Code

-Sublime Text

5.PROJECT STRUCTURE

Fitflex/

public/

src/

assets/

components/

screens/

services/

context/

utils/

hooks/

constants/

App.js
index.js
.env
package.json
README.md

6.RUNNING APPLICATION

- Frontend:
 - Install dependencies
 - npm install
 - Run the frontend
 - npm start
- Backend:
 - Run the server
 - npm start
- Access:
 - Visit <http://localhost:3000>

7.API DOCUMENTATION

Landing Page Coding:

<div>

{!form && (

<div style={{ textAlign: 'center', marginTop: '5rem' }}>

<h1>Welcome! Please Sign In or Sign Up</h1>

```
<button onClick={() => setForm('signin')}>Sign In</button>  
<button onClick={() => setForm('signup')}>Sign Up</button>  
</div>  
  )}  
  
{form === 'signin' && <SignIn onClose={() => onComplete()} />}  
{form === 'signup' && <SignUp onClose={() => onComplete()} />}  
</div>  
);  
};  
  
export default LandingPage;
```

SignIn Page Coding:

```
<div className="auth-container">  
  <form className="auth-form" onSubmit={handleSubmit}>
```

<h2>Sign In</h2>

<input type="email" placeholder="Email" required />

<input type="password" placeholder="Password" required />

<button type="submit">Sign In</button>

<button type="button" onClick={onClose} className="link-btn">Back</button>

</form>

</div>

SignUp Page Coding:

<div className="auth-container">

<form className="auth-form" onSubmit={handleSubmit}>

<h2>Sign Up</h2>

<input type="text" placeholder="Full Name" required />

<input type="email" placeholder="Email" required />

<input type="password" placeholder="Password" required />

<button type="submit">Sign Up</button>

<button type="button" onClick={onClose} className="link-btn">Back</button>

</form>

</div>

Bodypartscategory:

className="exercise" key={index} onClick={()=> navigate(/exercise/\${exercise.id})} >

```

    <img src={exercise.gifUrl} alt={exercise.name} />
  </h3>{exercise.name}</h3>
  <ul>
    <li>{exercise.target}</li>
    {exercise.secondaryMuscles.map((muscle, index) => {
      return index < 2 && (
        <li key={muscle} >{muscle}</li>
      )
    })}
  </ul>
}
```

```
export default BodyPartsCategory
```

8.USER INTERFACE

Landing Page:

Welcome! Please Sign In or Sign Up

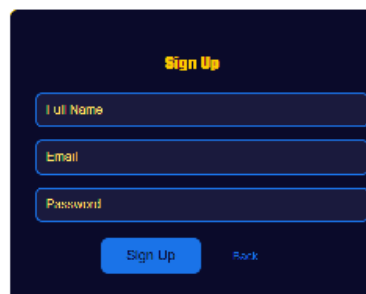
[Sign In](#) | [Sign Up](#)

SignIn Page:



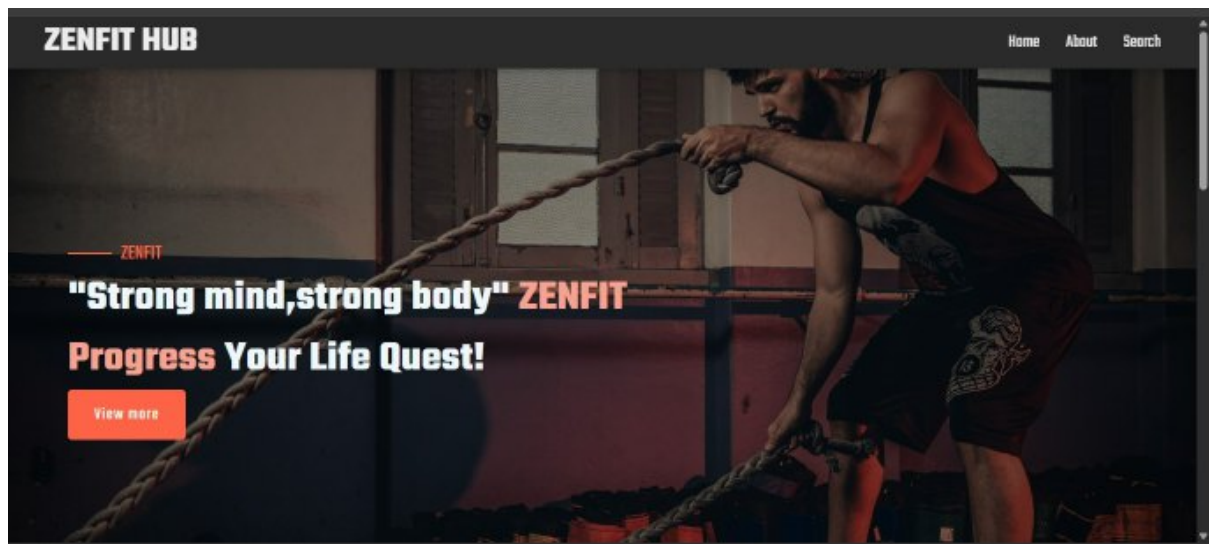
A dark-themed sign-in form with a yellow border. It features a title "Sign In" in yellow, followed by two input fields labeled "Email" and "Password" in white. At the bottom, there is a blue "Sign In" button and a white "Back" link.

Signup Page:

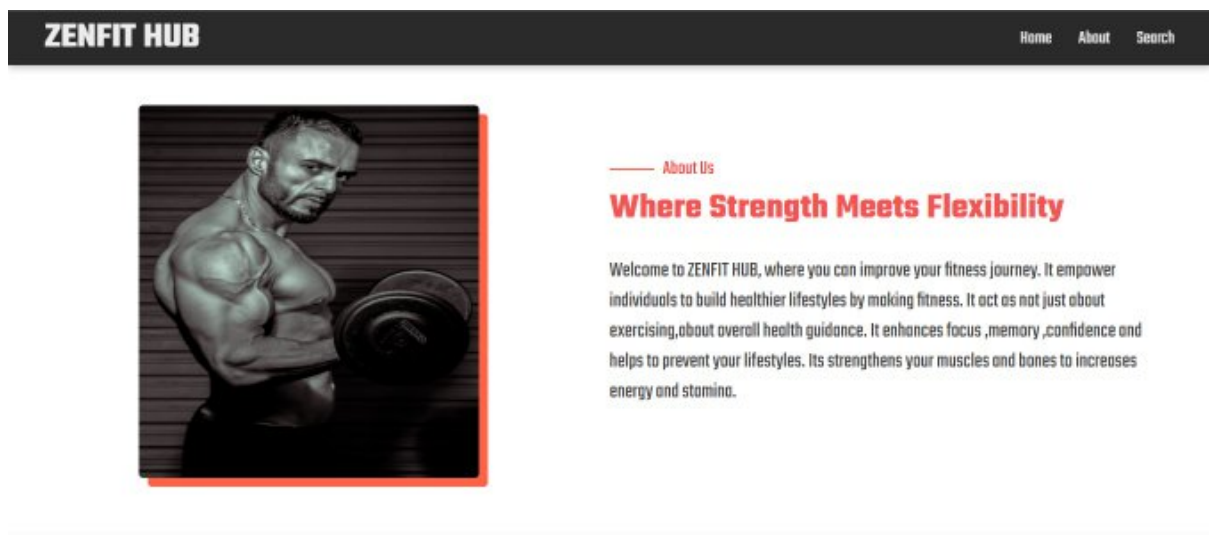


A dark-themed sign-up form with a yellow border. It features a title "Sign Up" in yellow, followed by three input fields labeled "Full Name", "Email", and "Password" in white. At the bottom, there is a blue "Sign Up" button and a white "Back" link.

Homescreen:



About us:



SearchScreen:

Search for Your Perfect Workout

Search by: [Body Parts](#) [Equipment](#)

Choose body part

Search

Popular Categories 🔗



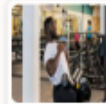
Back



Cardio



Dumbbells



Chest

BodyPartscategory:

- Neck

**side push neck stretch**

- levator scapulae
- trapezius
- sternocleidomastoid

**neck side stretch**

- levator scapulae
- trapezius
- sternocleidomastoid

9.DEMO LINK

https://drive.google.com/file/d/1r6gwjLa_tD9x9THSow_cBbLAT0KQZ3H6/view?usp=sharing

10.KNOWN ISSUES

No offline workout tracking.

No direct access to device sensors like in mobile apps.

11.FUTURE ENHANCEMENT

Group challenges & leaderboards.

Advanced Nutrition & Wellness.

Voice based fitness assistance.

Smart gym equipment connectivity.

Rewards, badges, streaks to boost user.

Online fitness personal trainers.

